

Independent claim 1 sets forth a "resin powder for a dermatologic composition, which comprises resin particles having an average volume particle size of 2.0 to 20.0  $\mu\text{m}$ , a shape factor SF1 of 110 to 140 and an average volume particle size distribution GSDv of 1.3 or less." Claims 2-4 and 7-17 depend, directly or indirectly, from claim 1.

The Office Action cites Yasuda as disclosing a resin powder composition comprising polystyrene particles of 4.8 micrometers and titanium dioxide. Yasuda is further cited as teaching that the particle size distribution and the actual particle size can be adjusted by adjusting the polymerization conditions to achieve specific powder properties. The Office Action admits that Yasuda does not teach shape factor, average volume particle size distribution, surfaceness index or volumetric ration, but asserts that, because Yasuda teaches modifying the size of the particles, it would have been obvious to modify Yasuda's teachings to achieve the shape factor, average volume particle size distribution, surfaceness index and volumetric ratio of claims 1-4 and 7-17. Applicants respectfully disagree.

Applicants respectfully submit that Yasuda does not teach or suggest resin particles having a shape factor SF1 of 110 to 140, as set forth in claim 1, and further does not teach or suggest modifying the particles taught by Yasuda to obtain the shape factor of claim 1.

When resin particles are prepared according to the teachings of Yasuda, the particles have a shape factor SF1 of 105, which is outside the range set forth in claim 1. *See* Declaration Under 37 C.F.R. §1.132, paragraphs 10-12, 17, 19, 20 (attached). As discussed in the instant specification, the shape factor SF1 is a numerical representation of the shape of the particles. *See* Specification, page 6, line 18 - page 7, line 11. The closer the shape factor is to 100, the more spherical the particles are. *See* Specification, page 6, line 18 - page 7, line 11. The shape of the particles is determined by controlling the agglomeration and fusion of the particles. *See* Specification, page 19, line 21 - page 20, line 19.

In contrast, the resin powder of claim 1 has a shape factor SF1 of 110 to 140. For example, a resin powder made according to Example 1 of the specification has a shape factor of 112. *See Declaration*, paragraphs 6-9, 19, 20.

Thus, Yasuda does not disclose or suggest particles having shape factor SF1 of 110 to 140.

Not only do the shape factor SF1 values for resin powders according to Yasuda and according to Example 1 differ, but the properties of the resin powders also differ. When the resin powder made according to the disclosures of Yasuda and resin powders made according to Example 1 are applied to the skin, the resin powder of Yasuda demonstrated an inferior affinity to the skin in comparison to the resin powder of Example 1. That is, a panel of individuals, applying the resin powders to the skin on the inside of an arm gave the Yasuda resin powder an average rating of 2.0, dry touch feeling that slightly remains on the skin 30 minutes after application, but gave the resin powder of Example 1 an average rating of 4.9, dry touch feeling of the skin that remains without deterioration 30 minutes after application. *See Declaration*, paragraphs 19-22.

In addition, solid powder foundations including resin powders according to Yasuda and Example 1, respectively, differ in their skin affinity. The panel evaluated a solid powder foundation according to Example 11 of the specification, which uses the resin powder of Example 1, and a solid powder foundation made by the same method as Example 11, but using the Yasuda resin powder in place of the powder of Example 1 ("the Yasuda foundation"). *See Declaration*, paragraphs 13-16. The solid powder foundation of Example 11 was, like the resin powder of Example 1, given an average rating of 4.9, dry touch feeling of the skin that remains without deterioration 30 minutes after application, while the Yasuda foundation was given an average rating of 2.7, dry touch feeling of the skin that lowers substantially 30 minutes after application. *See Declaration*, paragraphs 19-22.

The Office Action also asserts that "it would have been an obvious matter of design choice to exemplify powders with an SF1 of 110-140, ... since such a modification would have involved a mere change in the size of a component." Applicants respectfully disagree with this assertion.

Applicants respectfully submit that, as discussed above, the shape factor SF1 is not merely a feature of the size of the particle, but a measure of the surface irregularity. *See* Specification, page 6, line 18 - page 7, line 25. Controlling the shape factor, and obtaining the benefits associated with controlling the shape factor to be within the range set forth in claim 1, can be accomplished by controlling the agglomeration and fusion procedures in an emulsion polymerization and agglomeration method, or by controlling the solvent removing procedure in a dissolving and suspending method, not the particle size. *See* Specification, page 19, line 21 - page 20, line 19.

However, Yasuda does not provide any disclosure or suggestion with respect to controlling the shape factor of particles. Rather, Yasuda states that the polymerization techniques discussed therein, emulsion polymerization, suspension polymerization and precipitate polymerization have "the advantage [that] the polymer is carrying out particle shape promptly." *See* Yasuda, paragraph [0010]. That is, the particle is in the desired shape immediately after polymerization. Yet these disclosed polymerization techniques produce generally spherical particles. *See* Specification, page 1, lines 23-25; page 19, line 21 - page 20, line 19. Thus, Yasuda does not disclose or suggest modifying its particles to obtain particles having shape factor SF1 of 110 to 140.

Applicants respectfully submit that claim 1 and its dependent claims 2-4 and 7-17 are patentable over Yasuda. Reconsideration and withdrawal of this rejection are respectfully requested.

**B. Claims 5 and 6**

The Office Action rejects claims 5 and 6 under 35 U.S.C. §103(a) over Yasuda in view of Japanese Patent Application Publication JP 06-070702 (JP '702). Applicants respectfully traverse the rejection.

Claim 1 is as set forth above. Claims 5 and 6 depend from claim 1 and include the additional limitations that "the resin has a number-average molecular weight of 3,000 to 20,000" and that "the resin has a weight-average molecular weight of 6,000 to 100,000," respectively.

The Office Action applies Yasuda to claims 5 and 6 in the same manner as to claim 1, discussed above. The Office Action admits that Yasuda does not state the molecular weight of the resin.

For at least the same reasons discussed above with respect to claim 1, Applicants respectfully submit that Yasuda would not have rendered claims 5 and 6 obvious. JP '702 does not remedy the shortcomings of Yasuda.

The Office Action cites the teaching of JP '702 of a powder having a molecular weight of 500-100,000 for use in cosmetic preparations, and asserts that the molecular weight of polystyrene can be varied by simple manipulation of the number of repeating units.

JP '702, like Yasuda, fails to teach or suggest regulating the shape factor SF1 to 110 to 140. JP '702 does not teach or suggest the agglomeration of resin particles or provide any motivation for altering and controlling the shape factor SF1. Further, JP '702 does not teach or suggest any benefits provided by controlling the shape factor SF1, such as the advantageous effects of simultaneously attaining spreadability upon application and affinity to the skin by using the particulate resin as set forth in claim 1.

Because neither Yasuda nor JP '702 disclose or suggest resin particles having shape factor SF1 in the range of 110 to 140, as set forth in claim 1, Applicants respectfully submit

that Yasuda and JP '702, individually or in combination, would not have rendered claims 5 and 6 obvious.

Thus, Applicants respectfully submit that claims 5 and 6 are patentable over Yasuda in combination with JP '702. Accordingly, reconsideration and withdrawal of the rejection are respectfully requested.

## II. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-22 are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Declaration Under 37 C.F.R. §1.132

Date: October 25, 2004

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